

**WASHINGTON STATE DEPARTMENT OF ECOLOGY
CENTRAL REGIONAL OFFICE
15 W YAKIMA, SUITE 200
YAKIMA, WASHINGTON 98902**

IN THE MATTER OF THE COMPLIANCE BY)	AIR OPERATING PERMIT
PUBLIC UTILITY DISTRICT NO. 1 OF KLIKITAT COUNTY)	No. 11AQ-C163
H.W. Hill Landfill Gas Power Plant)	
with Section 70.94.161 RCW, Operating Permits for)	
Air Contaminant Sources, and the applicable rules and)	DRAFT PERMIT
regulations of the Department of Ecology)	

To: Jim Smith, General Manager, OR Ron Ihrig, Operations Manager
Public Utility District No. 1 of Klickitat County
1313 South Columbus Avenue
Goldendale, Washington 98620

Issuance Date:	<u>DRAFT</u>
Effective Date:	<u>August 7, 2011</u>
Expiration Date:	<u>August 6, 2016</u>

Responsible Official: Jim Smith, General Manager, OR Ron Ihrig, Operations Manager

Source Location: 502 Roosevelt Grade Road, Roosevelt, Washington 99356

Legal Authority: This AIR OPERATING PERMIT is issued under the authority and provisions of the Federal Clean Air Act, (42 U.S.C. 7401, et seq.), the Washington Clean Air Act, Chapter 70.94 Revised Code of Washington and the Operating Permit Regulation, Chapter 173-401 Washington Administrative Code.

Hereinafter, Public Utility District No. 1 of Klickitat County is called the permittee. The permittee is required to comply with the provisions contained within this permit.

This permit is DATED at Yakima, Washington this [day] day of [month], [year].

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LIST OF ABBREVIATIONS

AOP	air operating permit
ASTM	American Society for Testing and Materials
CEMS	continuous emissions monitoring system
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂ e	carbon monoxide equivalent
Ecology	Washington State Department of Ecology
ECT	emission control technology
EPA	United States Environmental Protection Agency
FCAA	federal clean air act
FDCP	fugitive dust control plan
GHG	greenhouse gas
gr/dscf	grains per dry standard cubic foot
HAP	hazardous air pollutant
HRSG	heat recovery steam generator
hr/yr	hour per year
IC	internal combustion
lb/hr	pound per hour
LFG	landfill gas
MMBtu	one million British thermal units
MVAC	motor vehicle air conditioner
MW	megawatt
NMOC	non-methane organic compound
NOC	notice of construction
NO _x	oxides of nitrogen
NSPS	new source performance standard
O&M	operations and maintenance
PM	particulate matter
PM _{2.5}	particulate matter with aerodynamic diameter ≤ 2.5 micrometers
PM ₁₀	particulate matter with aerodynamic diameter ≤ 10 micrometers
ppmdv	parts per million by dry volume
PSD	prevention of significant deterioration
QA/QC	quality assurance, quality control
RACT	reasonably available control technology
RCW	Revised Code of Washington
S	state only enforceable requirement
scfm	standard cubic foot per minute
SIP	state implementation plan
SO ₂	sulfur dioxide
VOC	volatile organic compound
WAC	Washington Administrative Code

1.0 EMISSION UNIT IDENTIFICATION

The requirements identified in this permit apply to all air emissions from the H.W. Hill Landfill Gas Power Plant facility located at 502 Roosevelt Grade Road, Roosevelt, Washington. Specific requirements for the processes of the facility are listed in section six of this permit. The permitted emission processes are listed in the table below.

Source Description (Name, Permit Section)	Emission Points	Control Device (Name, Permit Section)	Process Description
IC Engine Power Generation (a.k.a. Process #1, see Table 6.2)	5 Stacks	Landfill Gas Treatment System No. 1 (a.k.a. Process #2, see Table 6.3)	Electrical generation using five internal combustion engines fueled by landfill gas. Generates up to 10.5 MW of electricity.
Combustion Turbine Power Generation (a.k.a. Process #3, see Table 6.4)	4 Stacks	Landfill Gas Treatment System No. 2 (a.k.a. Process #4, see Table 6.5)	Electrical generation using two 10.1-MW landfill gas-fired combustion turbines and two 4-MW unfired heat recovery steam generators (HRSG). Generates approximately 28.2 MW of electricity.
Enclosed Flare (a.k.a. Process #5, see Table 6.6)	1 Vent	None	Small open, candle type, flare combusts up to 7,875 standard cubic feet of landfill gas per hour during periods when the Landfill Gas Treatment System No. 2 is undergoing maintenance. Flare also combusts landfill gas vented during carbon and iron sponge regeneration activities, and carbon changes.

2.0 PERMIT PROVISOS

2.1 Permit shield.

- 2.1.1 Compliance with the conditions of this permit shall be deemed compliance with those applicable requirements that are specifically included in and identified in the permit as of the date of permit issuance. [WAC 173-401-640(1), 8/13/01, 12/1/10 (S)]
- 2.1.2 The permit shield shall not apply to any insignificant emissions unit or activity designated under WAC 173-401-530. [WAC 173-401-530(3), 8/13/01, 12/1/10 (S)]

2.2 Severability. If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable. [WAC 173-401-620(2)(h), 8/13/01, 12/1/10 (S); RCW 70.94.905, 2011 (S)]

2.3 Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege. [WAC 173-401-620(2)(d), 8/13/01, 12/1/10 (S)]

2.4 Transfer of ownership or operation. A change in ownership or operational control of this source is treated as an administrative permit amendment if no other change in this permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to Ecology. [WAC 173-401-720(1)(d), 8/13/01, 12/1/10 (S)]

2.5 Emissions trading. No permit revision shall be required, under any approved economic incentives, marketable permits, emission trading, and other similar programs or processes for changes that are provided for in this permit. [WAC 173-401-620(2)(g), 8/13/01, 12/1/10 (S)]

2.6 Enforceability. All terms and conditions of the permit are enforceable by the EPA and citizens unless specifically designated as state (S) enforceable. [WAC 173-401-625, 8/13/01, 12/1/10 (S)]

2.7 General Obligation. Exclusions. Nothing in this permit shall alter or affect the following:

- 2.7.1 The provisions of section 303 of the FCAA (emergency orders), including the authority of the administrator under that section;
- 2.7.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 2.7.3 The applicable requirements of the acid rain program, consistent with section 408(a) of the FCAA;

- 2.7.4 The ability of EPA to obtain information from a source pursuant to section 114 of the FCAA; or
- 2.7.5 The ability of Ecology to establish or revise requirements for the use of RACT as provided in Chapter 252, Laws of 1993.
[WAC 173-401-640(4), 8/13/01, 12/1/10 (S)]
- 2.8 Reasonably Available Control Technology . Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance or renewal shall be considered RACT for purpose of permit issuance or renewal. This does not preclude RACT determinations under Section 8, Chapter 252, Laws of 1993, which shall be incorporated into an operating permit as provided in WAC 173-401-730. [WAC 173-401-605(3), 8/13/01, 12/1/10 (S); RCW 70.94.154, 2011 (S)]
- 2.9 Need to halt or reduce activity is not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WAC 173-401-620(2)(b), 8/13/01, 12/1/10 (S)]
- 2.10 Permit actions. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, does not stay any permit condition. [WAC 173-401-620(2)(c), 8/13/01, 12/1/10 (S)]
- 2.11 Permit continuation. This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete renewal application has been submitted. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete renewal application has been submitted. [WAC 173-401-620(2)(j), 8/13/01, 12/1/10 (S)]
- 2.12 Permit appeals. You have a right to appeal this permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this permit. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of this permit:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology - in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Address and Location Information:

Street Addresses

Department of Ecology
Attn: Appeals Processing Desk
300 Desmond Drive SE
Lacey, WA 98503

Pollution Control Hearings Board
1111 Israel RD SW
STE 301
Tumwater, WA 98501

Mailing Addresses

Department of Ecology
Attn: Appeals Processing Desk
PO Box 47608
Olympia, WA 98504-7608

Pollution Control Hearings Board
PO Box 40903
Olympia, WA 98504-0903

This provision for appeal in this section is separate from and additional to any federal rights to petition and review under section 505(b) of the FCAA. [WAC 173-401-620(2)(i), 8/13/01, 12/1/10 (S); RCW 70.94.221, 2011 (S)]

3.0 PERMIT ADMINISTRATION

- 3.1 Duty to comply. The permittee must comply with all conditions of this WAC 173-401 permit. Any permit noncompliance constitutes a violation of Chapter 70.94 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [WAC 173-401-620(2)(a), 8/13/01, 12/1/10 (S)]
- 3.2 Inspection and entry.
Upon presentation of credentials and other documents as may be required by law, the permittee shall allow Ecology, or an authorized representative to perform the following:
 - 3.2.1 Enter upon the permittee's premises where a Chapter 173-401 WAC source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - 3.2.2 Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - 3.2.3 Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - 3.2.4 As authorized by WAC 173-400-105 and the FCAA, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements. [WAC 173-401-630(2), 8/13/01, 12/1/10 (S); RCW 70.94.200, 2011 (S); NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.11.3; ECT Order No. 05AQ-C014, 3/11/05, Condition 2.4.3 (S); NOC Order No. 08AQ-C080 2nd Revision, 3/25/11, Condition 2.12.5]
 - 3.2.4.1 Ecology may require the permittee to conduct stack and/or ambient air monitoring and report the results to Ecology. [WAC 173-400-105(2), 8/20/93, 3/1/11 (S)]
 - 3.2.4.2 Ecology may conduct or require that a test be conducted using approved EPA methods from 40 CFR 60 Appendix A or approved procedures contained in "Source Test Manual - Procedures for Compliance Testing," Ecology, 7/12/90. The permittee may be required to provide platform and sampling ports. Ecology shall be allowed to obtain a sample from any emissions unit. The permittee shall be given the opportunity to observe the sampling and to obtain a sample at the same time. [WAC 173-400-105(4), 8/20/93, 3/1/11 (S)]
 - 3.2.5 Ecology may conduct source tests and require access to records, books, files, and other information specific to the control, recovery, or release of pollutants regulated under 40 CFR Part 61. [WAC 173-400-075(2), 3/1/11 (S)]
 - 3.2.6 No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his or her official duties. [RCW 70.94.200, 2011 (S)]
- 3.3 Permit fees. The permittee shall pay fees as a condition of this permit in accordance with Ecology's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in chapter 70.94 RCW. Ecology may revoke this permit if the permit fees are not paid. [WAC 173-401-620(2)(f), 8/13/01, 12/1/10 (S); RCW 70.94.162(1), 2011; WAC 173-401-930(3), 8/13/01, 12/1/10 (S)]
- 3.4 Duty to provide information. The permittee shall furnish to Ecology, within a reasonable time, any information that Ecology may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to Ecology copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-401-620(2)(e), 8/13/01, 12/1/10 (S)]
- 3.5 Recordkeeping.
 - 3.5.1 Permittee shall keep records of required monitoring information that includes, where applicable, the following:
 - 3.5.1.1 The date, place, and time of sampling or measurements;
 - 3.5.1.2 The date(s) analyses were performed;
 - 3.5.1.3 The company or entity that performed the analyses;
 - 3.5.1.4 The analytical techniques or methods used;
 - 3.5.1.5 The results of such analyses; and
 - 3.5.1.6 The operating conditions as existing at the time of sampling or measurement. [WAC 173-401-615(2)(a), 8/13/01, 12/1/10 (S)]
 - 3.5.2 Permittee shall keep records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. [WAC 173-401-615(2)(b), 8/13/01, 12/1/10 (S)]

- 3.5.3 Permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings from continuous monitoring instrumentation, and copies of all reports required by this permit. [WAC 173-401-615(2)(c), 8/13/01, 12/1/10 (S); NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.7.4; NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.10.11]
- 3.6 Reporting.
- 3.6.1 Unless otherwise noted, permittee shall submit reports of required monitoring (i.e., Monitoring, Recordkeeping, and Reporting column of section 5) at least once every six (6) months. At a minimum, reports for August 1st through January 31st and February 1st through July 31st, shall be due March 15th and September 15th, respectively. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with WAC 173-401-520. [WAC 173-401-615(3)(a), 8/13/01, 12/1/10 (S)]
- 3.6.2 Permittee shall report deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventative measures taken. Such deviations shall be reported 'promptly'. For deviations which represent a potential threat to human health or safety, 'promptly' means as soon as possible, but in no case later than twelve (12) hours after the deviation is discovered. The source shall maintain a contemporaneous record of all deviations. Other deviations shall be reported no later than thirty (30) days after the end of the month during which the deviation is discovered. Copies of reports shall be sent to Ecology at:
- Section Manager
Central Regional Air Quality Section
Department of Ecology
15 West Yakima Avenue, Suite 200
Yakima, Washington 98902
- [WAC 173-401-615(3)(b), 8/13/01, 12/1/10 (S)]
- 3.7 Excess emissions.
- 3.7.1 Excess emissions due to emergency. The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:
- 3.7.1.1 An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- 3.7.1.2 The permitted source was at the time being properly operated;
- 3.7.1.3 During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and
- 3.7.1.4 The permittee submitted notice of the emergency to Ecology within two (2) working days of the time when emission limitations were exceeded due to the emergency or shorter periods of time specified in an applicable requirement. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- [WAC 173-401-645, 8/13/01, 12/1/10 (S)]
- 3.7.2 Unavoidable excess emissions. Excess emissions determined to be unavoidable under the procedures and criteria in WAC 173-400-107 shall be excused and not subject to penalty.
- 3.7.2.1 The permittee shall have the burden of proving to Ecology that excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief under 2.7.2.2, 2.7.2.3, or 2.7.2.4.
- 3.7.2.2 Excess emission due to startup or shutdown conditions shall be considered unavoidable provided the source reports as required under WAC 173-400-107(3) and adequately demonstrates that the excess emissions could not have been prevented through careful planning and design and if a bypass of control equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.
- 3.7.2.3 Excess emission due to scheduled maintenance shall be considered unavoidable if the source reports as required under WAC 173-400-107(3) and adequately demonstrates that the excess emissions could not have been avoided through reasonable design, better scheduling for maintenance or through better operation and maintenance practices.
- 3.7.2.4 Excess emissions due to upsets shall be considered unavoidable provided the source reports as required under WAC 173-400-107(3) and adequately demonstrates that:
- 3.7.2.4.1 The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;

- 3.7.2.4.2 The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- 3.7.2.4.3 The operator took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emission unit as necessary to minimize emissions, when the operator knew or should have known that an emission standard or permit condition was being exceeded.
- 3.7.2.5 Required reporting. Excess emissions which represent a potential threat to human health or safety or which the owner or operator of the source believes to be unavoidable shall be reported to Ecology as soon as possible. Other excess emissions shall be reported within thirty (30) days after the end of the month during which the event occurred or as part of the routine emission monitoring reports. Upon request by Ecology, the permittee shall submit a full written report including the known causes, the corrective actions taken, and the preventative measures to be taken to minimize or eliminate the chance of recurrence.
- [WAC 173-400-107, 8/20/93, 3/1/11 (S); NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.12.10]
- 3.8 Submittals.
- 3.8.1 Reports, test data, monitoring data, and notifications, required by this permit, and requests for permit renewal shall be submitted to Ecology at:
Section Manager
Central Regional Air Quality Section
Department of Ecology
15 West Yakima Avenue, Suite 200
Yakima, Washington 98902
- 3.8.2 Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [WAC 173-401-520, 8/13/01, 12/1/10 (S)]
- 3.8.3 Duty to supplement or correct application. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit. [WAC 173-401-500(6), 8/13/01, 12/1/10 (S)]
- 3.9 Emission inventory . Permittee shall submit an inventory of emissions from the source for each calendar year. The inventory shall include segmented stack and fugitive emissions of TSP, PM₁₀, PM_{2.5}, SO_x, CO, NO_x, VOC, lead, and ammonia. The inventory shall be submitted for each calendar year, no later than April 15th of the following year.

Additionally, the inventory for calendar years 2011 and 2014, shall specify inventory year, inventory start date, inventory end date, contact name, contact phone number, FIPS code, facility ID codes, unit ID code, process ID code, stack ID code, site name, physical address, SCC, fuel heat content (annual average), fuel heat content (ozone season, if applicable), fuel ash content (annual average), fuel sulfur content (annual average), pollutant code, activity/throughput (for each period reported), summer day emissions, annual emissions, emission factor, winter throughput (%), spring throughput (%), summer throughput (%), fall throughput (%), hr/day in operation, day/wk in operation, wk/yr in operation, stack latitude, stack longitude, stack height, stack diameter, exit gas temperature, exit gas velocity, exit gas flow rate, NAICS at the Facility level, maximum generator nameplate Capacity, primary capture and control efficiencies (%), total capture and control efficiency (%), control device type, emission type, emission release point type, rule effectiveness (%), as defined in 40 Code of Federal Regulations Part 51 Subpart A Appendix A , 12/17/08.

The source shall maintain records of information necessary to substantiate any reported emissions, consistent with the averaging times for the applicable standards. Emission inventories shall be sent to Ecology at:

Section Manager
Central Regional Air Quality Section
Department of Ecology
15 West Yakima Avenue, Suite 200
Yakima, Washington 98902

[WAC 173-400-105(1), 8/20/93, 3/1/11 (S); NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.12.4]

- 3.10 Reporting of emissions of greenhouse gases. Beginning with 2012 emissions, if the permittee emits 10,000 metric tons of GHGs or more per calendar year, as defined under WAC 173-441-020(1)(g), reporting of GHG to Ecology is mandatory. (Note: WAC 173-441-030(5) details reporting requirements for facilities which historically exceed the threshold, but currently have lower CO₂e emissions.)

Permittee shall develop a written GHG monitoring plan in accordance with WAC 173-441-050(6)(e). The permittee shall revise the GHG monitoring plan as needed to reflect changes in processes, monitoring instrumentation, and quality assurance procedures; or to improve procedures for the maintenance and repair of monitoring systems to reduce the frequency of monitoring equipment downtime.

[WAC 173-441-050(6), 8/13/01, 12/1/10 (S)]

Reports must meet the requirements of WAC 173-441-050, and include the annual emissions of the GHGs listed in WAC 173-441-040 from source categories listed in WAC 173-441-120. The annual GHG report shall be submitted electronically in accordance with the requirements of WAC 173-441-050 and 173-441-060 and in a format specified by Ecology. Report submission due dates:

- 3.10.1 Facilities required to report GHG emissions to the EPA under 40 C.F.R. Part 98 must submit a report to Ecology no later than March 31st of each calendar year for GHG emissions in the previous calendar year.
- 3.10.2 Facilities not required to report GHG emissions to the EPA under 40 C.F.R. Part 98 must submit a report to Ecology no later than October 31st of each calendar year for GHG emissions in the previous calendar year. (Note: Permittee is anticipated to trigger this report deadline.)

All requests, notifications, and communications to Ecology pursuant GHG emissions reporting, other than submittal of the annual GHG report, shall be submitted to the following address:

Greenhouse Gas Report
Air Quality Program
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

The permittee shall submit a revised annual GHG report within forty-five days of discovering that an annual GHG report that the person previously submitted contains one or more substantive errors. A substantive error is an error that impacts the quantity of GHG emissions reported or otherwise prevents the reported data from being validated or verified. The revised report must correct all substantive errors.

Ecology may notify the permittee in writing that an annual GHG report previously submitted contains one or more substantive errors. Such notification will identify each such error. The permittee shall, within forty-five days of receipt of the notification, either resubmit the report that, for each identified substantive error, corrects the identified substantive error (in accordance with the applicable requirements of this permit) or provide information demonstrating that the previously submitted report does not contain the identified substantive error or that the identified error is not a substantive error.

[WAC 173-441-050, 8/13/01, 12/1/10 (S); WAC 173-441-100, 8/13/01, 12/1/10 (S)]

The Permittee shall maintain records in accordance with WAC 173-441-050, retaining, at a minimum, the following:

- 3.10.3 A list of all units, operations, processes, and activities for which GHG emissions were calculated.
- 3.10.4 The data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type. These data include, but are not limited to, the following information:
 - 3.10.4.1 The GHG emissions calculations and methods used, as required by WAC 173-441-120, 8/13/01, 12/1/10 (S).
 - 3.10.4.2 Analytical results for the development of site-specific emissions factors.
 - 3.10.4.3 The results of all required analyses for high heat value, carbon content, and other required fuel or feedstock parameters.
 - 3.10.4.4 Any facility operating data or process information used for the GHG emission calculations.
- 3.10.5 Copies of the annual GHG reports.
- 3.10.6 Missing data computations. For each missing data event, also retain a record of the cause of the event and the corrective actions taken to restore malfunctioning monitoring equipment.
- 3.10.7 The results of all required certification and quality assurance tests of continuous monitoring systems, fuel flow meters, and other instrumentation used to provide data for the GHGs reported under this chapter.
- 3.10.8 Maintenance records for all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHGs reported under this chapter.

[WAC 173-441-050(6), 8/13/01, 12/1/10 (S)]

All costs of activities associated with administering the reporting program, as described in RCW 70.94.151(2), are fee eligible. Permittee must pay a reporting fee for each year they submit a report to Ecology. [WAC 173-441-110, 8/13/01, 12/1/10 (S)]

- 3.11 Permit renewal and expiration. This permit is issued for a fixed term of five (5) years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted. A renewal application is due February 5, 2015. A complete renewal application is due no later than August 5, 2015. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by Ecology on the renewal application. This protection shall cease to apply if, subsequent to a completeness determination, the applicant fails to submit by the deadline specified in writing by Ecology, any additional information identified as being needed to process the application. The application for renewal shall include the current permit number, the appropriate renewal fee, description of permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term and shall provide a compliance schedule therefore. The application shall be sent to:

Section Manager
Central Regional Air Quality Section
Department of Ecology
15 West Yakima Avenue, Suite 200
Yakima, Washington 98902

[WAC 173-401-610, 8/13/01, 12/1/10 (S); WAC 173-401-710, 8/13/01, 12/1/10 (S)]

- 3.12 Off-permit changes.

- 3.12.1 The source shall be allowed to make changes not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided that the proposed changes do not weaken the enforceability of the existing permit conditions. Any change that is a Title I modification or is a change subject to the acid rain requirements under Title IV of the FCAA must be submitted as a permit revision.

- 3.12.2 Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition.

- 3.12.3 Sources must provide contemporaneous written notice to Ecology and EPA of each such change.

- 3.12.4 Notification shall be submitted to Ecology at:

Section Manager
Central Regional Air Quality Section
Department of Ecology
15 West Yakima Avenue, Suite 200
Yakima, Washington 98902

and EPA Region 10 at:

ATTN: Air Permits Office AWT-107
U.S. EPA Region 10 Administrator
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

Such written notice shall describe each such change, including the date, any change in emissions characteristics, emitted pollutants, and any applicable requirement that would apply as a result of the change.

- 3.12.5 The change shall not qualify for the permit shield under WAC 173-401-640.

- 3.12.6 The permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

- 3.12.7 A source making a change under this section shall comply with applicable preconstruction review requirements established pursuant to RCW 70.94.152.

[WAC 173-401-724, 8/13/01, 12/1/10 (S)]

- 3.13 Changes not requiring permit revisions.

- 3.13.1 Permittee is authorized to make the changes described in this section without a permit revision, providing the following conditions are met:

- 3.13.1.1 The proposed changes are not Title I modifications;

- 3.13.1.2 The proposed changes do not result in emissions which exceed those allowable under the permit, whether expressed as a rate of emissions, or in total emissions;

- 3.13.1.3 The proposed changes do not alter permit terms that are necessary to enforce limitations on emissions from units covered by the permit; and

- 3.13.1.4 The source provides the administrator and Ecology with written notification at least seven (7) days prior to making the proposed changes except that written notification of a change made in response to an emergency shall be provided as soon as possible after the event. Notification shall be submitted to Ecology at:
Section Manager
Central Regional Air Quality Section
Department of Ecology
15 West Yakima Avenue, Suite 200
Yakima, Washington 98902
and EPA Region 10 at:
ATTN: Air Permits Office AWT-107
U.S. EPA Region 10 Administrator
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140
The permittee and Ecology shall attach each notice to their copy of the relevant permit.
- 3.13.2 Pursuant to conditions in 3.13.1, a Chapter 173-401 WAC source is authorized to make section 502(b)(10) changes without a permit revision.
- 3.13.2.1 For each such change, the written notification required under 3.13.1.4 shall include a brief description of the change within the permitted source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- 3.13.2.2 The permit shield authorized under WAC 173-401-640 shall not apply to any change made pursuant to this paragraph.
- 3.13.3 Pursuant to the conditions in 3.13.1, a Chapter 173-401 WAC source is authorized to trade increases and decreases in emissions in the permitted source, where the Washington SIP provides for such emissions trades without requiring a permit revision. This provision is available in those cases where the permit does not already provide for such emissions trading.
- 3.13.3.1 Written notification required under 3.13.1.4 shall include such information as may be required by the provision in the Washington SIP authorizing the emissions trade, including at a minimum, when the proposed change will occur, a description of each such change, any change in emissions, the permit requirements with which the source will comply using the emissions trading provisions of the Washington SIP, and the pollutants emitted subject to the emissions trade. The notice shall also refer to the provisions with which the source will comply in the applicable implementation plan and that provide for the emissions trade.
- 3.13.3.2 The permit shield described in WAC 173-401-640 shall not extend to any change made under this paragraph. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the applicable SIP authorizing the emissions trade.
- 3.13.4 Upon the request of the permittee, Ecology shall issue permits that contain terms and conditions, including all terms required under WAC 173-401-600 through 173-401-630 to determine compliance, allowing for the trading of emissions increases and decreases in the WAC 173-401 source solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit independent of otherwise applicable requirements. The permittee shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The emissions trading provisions shall not be applied to any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades.
- 3.13.4.1 Under this paragraph, the written notification required under 3.13.1.4, shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.
- 3.13.4.2 The permit shield described in WAC 173-401-640 shall extend to terms and conditions that allow such increases and decreases in emissions.
- 3.13.5 A source making a change under this section shall comply with applicable preconstruction review requirements established pursuant to 70.94.152 RCW.
[WAC 173-401-722, 8/13/01, 12/1/10 (S)]

3.14 Reopening for cause.

- 3.14.1 Permits shall be reopened and revised under any of the following circumstances:
- 3.14.1.1 Additional applicable requirements become applicable to a Chapter 173-401 WAC source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirements. No such

- reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j);
- 3.14.1.2 Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit;
 - 3.14.1.3 Ecology or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - 3.14.1.4 The administrator or Ecology determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3.14.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- 3.14.3 Reopening under this section shall not be initiated before a notice of such intent is provided to the Chapter 173-401 WAC source by Ecology at least thirty (30) days in advance of the date that the permit is to be reopened, except that Ecology may provide a shorter time period in the case of an emergency.
[WAC 173-401-730, 8/13/01, 12/1/10 (S)]
- 3.15 New source review. The permittee shall not construct new sources or make modifications required to be reviewed under WAC 173-400-010, WAC 173-400-560, WAC 173-400-720, WAC 173-400-820, or WAC 173-460-040 before the permittee obtains written final approval from Ecology in accordance with those regulations, pays the appropriate fees required by WAC 173-455-120, and pays the cost of public notice described in WAC 173-400-171. [WAC 173-400-110, 8/20/93, 3/1/11 (S); WAC 173-400-171, 8/20/93, 3/1/11 (S); WAC 173-400-560, 3/1/11 (S); WAC 173-400-720, 3/1/11 (S); WAC 173-400-820, 3/1/11 (S); WAC 173-455-120, 5/3/07 (S); WAC 173-460-040, 5/20/09 (S); RCW 70.94.152, 2011 (S); NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.5.6, 2.5.9]
- 3.16 Replacement or substantial alteration of emission control technology . Prior to replacing or substantially altering emission control technology subject to review under WAC 173-400-114, the permittee shall file for and obtain approval from Ecology according to that regulation. The permittee shall pay the appropriate fees required by WAC 173-455-120 prior to commencing construction. [WAC 173-400-114, 3/1/11 (S); WAC 173-455-120, 3/1/11 (S); RCW 70.94.153, 2011 (S)]
- 3.17 Nonroad Engines. Prior to installation or operation of a nonroad engine, as defined in WAC 173-400-030(56), the permittee shall meet the requirements of WAC 173-400-035. If the nonroad engine(s) has a cumulative maximum rated brake horsepower greater than 500, a notification of intent to operate will be submitted to Ecology. If the nonroad engine(s) has a cumulative maximum rated brake horsepower greater than 2,000, the permittee will not operate the engine(s) unless Ecology issues written approval to operate. [WAC 173-400-035, 3/1/11 (S)]
- 3.18 Demolition and renovation (asbestos) . Prior to, during, and after conducting any activity to which 40 CFR 60, Subpart M - National Emission Standard for Asbestos, applies, the permittee shall comply with the requirements of that rule. Such activities include demolition, renovation, asbestos stripping or removal, installing or reinstalling insulation, manufacturing or fabricating certain items, spraying of certain materials, constructing roadways of certain materials, or disposal. [40 CFR 61, Subpart M, 7/1/05; WAC 173-400-075(1), 3/1/11 (S)]
- 3.19 Federal CFC requirements (Title VI) .
- 3.19.1 The permittee shall comply with the following standards for recycling and emissions reductions pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:
 - 3.19.1.1 Persons conducting maintenance, service, repair, or disposing must follow the prohibitions pursuant to 40 CFR 82.154.
 - 3.19.1.2 Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156.
 - 3.19.1.3 Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - 3.19.1.4 Equipment used during the maintenance, service, repair or disposal must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
 - 3.19.1.5 Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

- 3.19.1.6 Persons conducting maintenance, service, repair, or disposing must certify to the Administrator that such person has acquired certified recovery or recycling equipment pursuant to 40 CFR 82.162.
 - 3.19.1.7 Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR 82.166.
 - 3.19.1.8 Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep servicing records documenting the date and type of service, as well as the quantity of refrigerant added to such appliances pursuant to 40 CFR 82.166.
 - 3.19.2 If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR 82, Subpart A - Production and Consumption Controls.
 - 3.19.3 If the permittee performs a service on monitor (fleet) vehicles and when this service involves ozone depleting substance refrigerant in the MVAC, the permittee is subject to all applicable requirements as specified in 40 CFR 82, Subpart B - Servicing of Motor Vehicle Air Conditioners.
 - 3.19.4 The permittee shall be allowed to switch from any ozone depleting substance to any alternative that is listed in the Significant New Alternative Program promulgated pursuant to 40 CFR 82, Subpart G - Significant New Alternative Policy Program.
- [40 CFR 82, 7/1/05; RCW 70.94.970, 2011 (S); RCW 70.94.980, 2011 (S)]

4.0 OPERATIONAL FLEXIBILITY

- 4.1 Authorization of multiple emission sources. The permittee is authorized to operate all emission sources approved by: NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06; ECT Order No. 05AQ-C014, 3/11/05; and NOC Order No. 08AQ-C080 2nd Revision, 3/25/11 so long as no term of this permit is violated.
 - 4.2 Scenarios requiring no monitoring. In the event that an emission unit is not operated, or is operated solely for maintenance purposes, during a period equal to or greater than the monitoring period designated, no monitoring is required. Recordkeeping and reporting must note:
 - 4.2.1 The reason why the emission unit was not operated,
 - 4.2.2 The length of time the emission unit was not operated,
 - 4.2.3 The occurrence and nature of the maintenance, and
 - 4.2.4 Where applicable, a statement that generation was not performed by the emission unit.
- [WAC 173-401-650, 8/13/01, 12/1/10 (S)]

5.0 COMPLIANCE PLAN

- 5.1 The permittee shall continue to comply with applicable requirements with which it is currently in compliance. [WAC 173-401-510(2)(h), 8/13/01, 12/1/10 (S)]
- 5.2 The permittee shall meet applicable requirements on a timely basis that become effective during the permit term. [WAC 173-401-510(2)(h), 8/13/01, 12/1/10 (S)]
- 5.3 Compliance certification.
 - 5.3.1 The permittee shall submit a certification of compliance with permit terms and conditions (i.e., sections 3, 4, 5, and 6) at least once per year. At a minimum a certification of compliance is due, for each August 1st, through July 31st, no later than the following September 15th. Ecology may require that compliance certifications be submitted more frequently for those emission units not in compliance with permit terms and conditions, or where more frequent certification is specified in the applicable requirement.
 - 5.3.2 The compliance certification shall include the following:
 - 5.3.2.1 The identification of each term or condition of the permit that is the basis of the certification;
 - 5.3.2.2 The compliance status;
 - 5.3.2.3 Whether compliance was continuous or intermittent; and
 - 5.3.2.4 The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with WAC 173-401-615(3)(a).
 - 5.3.3 Compliance certification shall be submitted to Ecology at:
Section Manager
Regional Air Quality Section
Department of Ecology
15 W Yakima Ave, Ste 200
Yakima, Washington 98902

and EPA Region 10 at:

ATTN: Air Permits Office AWT-107
U.S. EPA Region 10 Administrator
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

[WAC 173-401-630(5), 8/13/01, 12/1/10 (S)]

- 5.3.4 The permittee need not certify compliance for insignificant emission units or activities. [WAC 173-401-530(2)(d), 8/13/01, 12/1/10 (S)]
 - 5.3.5 For the purpose of submitting compliance certifications or establishing violations, the permittee shall not preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [40 CFR 60.11(g), 1/12/11]
- 5.4 Schedule of Compliance. The permittee is currently in violation of the test deadlines specified by 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines. The permittee must comply with the following schedule of compliance:
- 5.4.1 Within 60 days after achieving the maximum production rate at which the source will be operated, but not later than 90 days after the restart of each turbine, Klickitat PUD shall conduct initial performance testing, to demonstrate compliance with all applicable emission limits identified in this Order.
 - 5.4.2 Certified progress reports will be submitted to Ecology detailing the efforts made toward conducting the NO_x and sulfur performance tests required by Subpart KKKK. The reports will be submitted at least every 6 months until the performance test is completed and the test report is submitted to Ecology and EPA. The certified progress reports will be submitted together with the semi annual monitoring reports, required under condition 3.6.1.

6.0 APPLICABLE REQUIREMENTS

Until this permit expires, is modified, or revoked, this permittee is authorized to operate processes 1 through 5. These processes are subject to the requirements shown in the tables of sections 6.1 through 6.7 and the other terms and conditions specified in this permit.

6.1 Facility-Wide Sources. The following requirements apply SOURCE WIDE: including, but not limited to, the internal combustion (IC) engines, the combustion turbines, the landfill gas treatment for the IC engines, the landfill gas treatment for the combustion turbines, and the enclosed flare unless an alternate requirement is specifically stated for a particular emissions unit. Since monitoring, recordkeeping, and reporting has not specifically been required by Ecology for insignificant emission units, per WAC 173-400-105(1st ¶), 8/20/93, 3/1/11 (S), there are no air operating permit monitoring, recordkeeping, or reporting requirements for the insignificant emission units under this Source Wide section, as allowed per WAC 173-401-530(2)(c), 8/13/01, 12/1/10 (S).

	Applicable Requirement (Facility-Wide Sources)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.1.1	RCW 70.94.040, 1/3/11	S	It is unlawful for any person to cause air pollution, or permit it to be caused, in violation of RCW 70.94, or of any ordinance, resolution, rule or regulation validly promulgated thereunder.	None specified.	No additional monitoring required.
6.1.2	WAC 173-400-040(1st ¶), 8/20/93 WAC 173-400-040(1st ¶), 3/1/11; RCW 70.94.154, 2011	F S	All emissions units are required to use RACT.	None specified.	No additional monitoring required. NOTE: Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance or renewal shall be considered RACT for purposes of permit issuance or renewal. RACT determinations under Section 8, Chapter 252, Laws of 1993, shall be incorporated into this permit as provided in WAC 173-401-730.
6.1.3	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.7.4 NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.10.5, 2.10.11	F F	Records of all data required by this permit shall be maintained in a readily retrievable manner for a period of five (5) years or more, and be made available on-site to authorized representatives of Ecology during any site inspection.	None specified.	No additional monitoring required.
6.1.4	WAC 173-400-040(3)(a), 8/20/93 WAC 173-400-040(3)(a), 3/1/11	F S	Reasonable precautions shall be taken to prevent the release of air contaminants.	None specified.	Comply with 6.1.14 and 6.1.15. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]

	Applicable Requirement (Facility-Wide Sources)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.1.5	<p>NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.11.4, 4.11.5, 4.11.7</p> <p>ECT Order No. 05AQ-C014, 3/11/05, Conditions 2.3.3, 2.4.1, 2.4.4</p> <p>NOC Order No. 08AQ-C080 2nd Revision, 3/25/11, Conditions 2.12.7, 2.12.9</p>	<p>F</p> <p>S</p> <p>F</p>	<p>Operation of equipment must be conducted in compliance with all data & specifications submitted as part of the applications for:</p> <ul style="list-style-type: none"> • NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, • NOC Order No. 08AQ-C080 2nd Revision, 3/25/11, and • ECT Order No. 05AQ-C014, 3/11/05 <p>unless otherwise approved by Ecology. Any activity undertaken by the permittee, or others, in a manner which is inconsistent with the applications or this Permit, shall be subject to Ecology enforcement under applicable regulations.</p>	None specified.	<p>Legible copies of:</p> <ul style="list-style-type: none"> • NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, • NOC Order No. 08AQ-C080 2nd Revision, 3/25/11, • Fugitive Dust Control Plan(s), and • Required O&M manuals <p>shall be displayed on-site in a location known by and available to employees in direct operation of the described equipment, and shall be available to Ecology upon request. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.11.4; ECT Order No. 05AQ-C014, 3/11/05, Conditions 2.3.3, 2.4.1; and NOC Order No. 08AQ-C080 2nd Revision, 3/25/11, Condition 2.12.9]</p> <p>The data and specifications submitted as part of the applications for the NOC Orders shall also be kept on file. This Orders and the file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]</p>
6.1.6	<p>NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.11.8</p> <p>ECT Order No. 05AQ-C014, 3/11/05, Condition 2.4.5</p> <p>NOC Order No. 08AQ-C080 2nd Revision, 3/25/11, Condition 2.12.8</p>	<p>F</p> <p>S</p> <p>F</p>	<p>Nothing in:</p> <ul style="list-style-type: none"> • NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, • NOC Order No. 08AQ-C080 2nd Revision, 3/25/11, and • ECT Order No. 05AQ-C014, 3/11/05 <p>shall be construed so as to relieve the permittee of its obligations under any state, local, or federal laws or regulations.</p>	None specified.	No additional monitoring required.

	Applicable Requirement (Facility-Wide Sources)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.1.7	<p>WAC 173-400-040(1), 8/20/93</p> <hr/> <p>WAC 173-400-040(2), 3/1/11</p>	<p>F</p> <hr/> <p>S</p>	<p>Opacity shall not exceed 20% for more than three (3) minutes, in any one (1) hour.</p>	<p>Ecology Method 9A, "Source Test Manual - Procedures for Compliance Testing," State of Washington Department of Ecology, 7/12/90</p>	<p>1) The permittee shall conduct monthly visible emissions surveys of all emission units during daylight hours as follows: a) the survey shall be conducted from a location with a clear view of the emission unit and where the sun is not directly in the observer's eyes. The survey location shall be at least 15 feet but not more than 0.25 miles from the source; b) survey shall be conducted during operation; c) the observer will be educated in the general procedures for determining the presence of visible emissions (i.e. effects on the visibility of emissions caused by background contrast, position of the sun and amount of ambient lighting, and observer position relative to source and sun); d) the survey shall consist of a minimum 15-second visual observation of each emission unit to identify those emission units which exhibit visible emissions; e) in addition to the records required under condition 2.15, the observer shall record the wind direction, sky condition, sun location with respect to the source and the survey location, and the time duration of the survey.</p> <p>2) The permittee shall conduct Ecology Method 9A testing of an emission unit when visible emissions, other than uncombined water, are observed during a survey or are otherwise observed by the permittee. Testing shall be conducted as follows: a) testing shall be initiated as soon as possible, but not later than 24 hours after the requirement to conduct such testing is triggered; b) all testing shall be performed during periods when the subject emissions unit is operating; c) testing shall consist of certified opacity readings at 15-second intervals over a minimum period of six consecutive minutes (24 consecutive readings) unless any two readings are greater than 20% opacity in which case the testing period shall be 60 consecutive minutes or until a violation is documented. If a violation is documented, appropriate and timely action shall be taken (as soon as possible, but within 24 hours) to identify and correct the problem causing the</p>

Applicable Requirement (Facility-Wide Sources)		Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
					opacity. The required recordkeeping shall include the name of the person recording the information, the name(s) of the person(s) taking the corrective action, and the nature, time, date, and effectiveness of any corrective action taken in response to a violation. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.1.8	WAC 173-400-040(3), 3/1/11	S	No person shall cause or permit the emission of PM from any source to be deposited beyond the property under direct control of the owner(s) or operator(s) of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.	None specified.	Comply with 6.1.14 and 6.1.15. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.1.9	WAC 173-400-040(5), 3/1/11	S	Odors which may unreasonably interfere with use and enjoyment of property are prohibited unless recognized good practice and procedures are employed to reduce odors to a reasonable minimum.	None specified.	Comply with 6.1.14. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.1.10	WAC 173-400-040(5), 8/20/93	F	No emissions detrimental to persons or property.	None specified.	Comply with 6.1.14 and 6.1.15. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
	WAC 173-400-040(6), 3/1/11	S			
6.1.11	WAC 173-400-040(7), 8/20/93	F	No person shall cause or permit the installation or use of any means which conceals or masks an emission of an air contaminant.	None specified.	No additional monitoring required.
	WAC 173-400-040(8), 3/1/11	S			

Applicable Requirement (Facility-Wide Sources)		Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.1.12	WAC 173-400-040(8)(a), 8/20/93 WAC 173-400-040(9)(a), 3/1/11	F S	Permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne and shall maintain and operate the source to minimize emissions.	None specified.	Comply with 6.1.15. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.1.13	WAC 173-400-200(2), 8/20/93 WAC 173-400-200(2), 3/1/11	F S	No use of excess stack height or dispersion techniques shall be used to meet ambient air quality standards or PSD increments.	None specified.	No additional monitoring required.
6.1.14	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.7.1 NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.10.1	F F	Keep records of complaints as received from the public, Ecology, or any other entity.	None specified.	Keep records of complaints as received from the public, Ecology, or any other entity. Any complaints shall be promptly addressed and assessed. A record shall be maintained of permittee’s action to investigate the validity of the complaint and what, if any, corrective action was taken in response to the complaint Ecology shall be notified within three (3) days of receipt of any complaint. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.7.1; NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.10.1]
6.1.15	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.9, 4.11.4 NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.11.2, 2.11.3, 2.12.9	F F	Fugitive dust will be controlled in accordance with a FDCP. Legible copy shall be kept on-site in a location known by and available to persons in direct operation of the described equipment.	FDCP shall at a minimum include: <ul style="list-style-type: none"> Measures to ensure no vehicle trackout onto off-site roads, and Management of disturbed surfaces by paving, graveling, or re-vegetating. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.9.2; NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.11.2, 2.11.3]	The FDCP shall be kept on file. This file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]

	Applicable Requirement (Facility-Wide Sources)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.1.16	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.11.1 NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.12.1	F F	No outdoor burning shall be performed at the site.	None specified.	No additional monitoring required.
6.1.17	WAC 173-400-205, 8/20/93 WAC 173-400-205, 3/1/11	F S	No varying of emissions according to atmospheric conditions or ambient concentrations.	None specified.	No additional monitoring required.

6.2 Process #1, Power Generation – IC Engines. The following applicable requirements apply to the five internal combustion engines and their associated exhausts.

	Applicable Requirement (Process #1, Power Generation – IC Engines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.2.1a	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.1.1, 4.2, 4.6, 4.6.1	F	PM emissions controlled by engine design, including turbocharger, automatic air-fuel ratio control, and proper operation and maintenance as described in the O&M manual.	EPA Methods 1 through 5, 40 CFR 60, Appendix A, 7/1/96, or alternate methods proposed by permittee in writing and approved by Ecology in advance of testing. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.6.1]	Each engine-generator set shall be tested at intervals \leq five (5) years and at a power output \geq 90% of the maximum allowable power output for the set. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.6]
6.2.1b	WAC 173-400-050(1), 8/20/93 WAC 173-400-050(1), 3/1/11; ECT Order No. 05AQ-C014, 3/11/05, Condition 2.2.1	F S	PM shall not exceed 0.1 grain/dscf.	See 6.2.1a.	Comply with 6.2.1a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]

Applicable Requirement (Process #1, Power Generation – IC Engines)		Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.2.1c	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.5.1 ECT Order No. 05AQ-C014, 3/11/05, Condition 2.2.1	F S	PM ₁₀ emissions from any single engine ≤ 0.65 lb/hr. Total PM ₁₀ emissions from all engines ≤ 3.25 lb/hr.	See 6.2.1a.	Comply with 6.2.1a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.2.2a	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.1.2, 4.6	F	CO emissions shall be controlled by engine design, including turbocharger, automatic air-fuel ratio control, and proper operation and maintenance as described in the O&M manual.	EPA Method 10, 40 CFR 60, Appendix A, 7/1/96, or alternate methods proposed by permittee in writing and approved by Ecology in advance of testing. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.6.2]	Each engine-generator set shall be tested at intervals ≤ five (5) years and at a power output ≥ 90% of the maximum allowable power output for the set. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.6]
6.2.2b	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.5.2, 4.6.2, 4.7.5 ECT Order No. 05AQ-C014, 3/11/05, Condition 2.2.1 Settlement Agreement and Agreed Order No. 2854, 10/14/05, Condition IV.D	F S	Total CO emissions from all engines ≤ 238 tpy. CO emissions from any single engine ≤ 11.06 lb/hr.	CO shall be monitored with a portable CO analyzer or a CO CEMS according to a QA/QC plan, approved in writing by Ecology. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.7.5]	Monitor each engine at least once every two calendar days in operation. Monitoring results shall be paired with the engine’s corresponding hours of operation [Settlement Agreement & Agreed Order No. 2854, effective 10/14/05, Condition IV.D., (S)]
6.2.3a	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.1.3, 4.2, 4.6, 4.6.3	F	NO _x emissions shall be controlled by engine design, including lean-burn, low-NO _x design, turbocharger, and proper operation and maintenance as described in the O&M manual.	EPA Method 7E, 40 CFR 60, Appendix A, 7/1/96, or alternate methods proposed by permittee in writing and approved by Ecology in advance of testing. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.6.3]	Each engine-generator set shall be tested at intervals ≤ five (5) years and at a power output ≥ 90% of the maximum allowable power output for the set. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.6]

Applicable Requirement (Process #1, Power Generation – IC Engines)		Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.2.3b	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.5.3, 4.6.3 ECT Order No. 05AQ-C014, 3/11/05, Condition 2.2.1	F S	NO _x emissions from any single engine ≤9.76 lb/hr. Total NO _x emissions from all engines ≤48.78 lb/hr.	See 6.2.3a.	Comply with 6.2.3a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.2.4a	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.1.4, 4.2, 4.6	F	VOC emissions shall be controlled by engine design, including turbocharger, automatic air-fuel ratio control, and proper operation and maintenance as described in the O&M manual.	EPA Method 25A or EPA Method 18, 40 CFR 60, Appendix A, 7/1/96, or alternate methods proposed by permittee in writing and approved by Ecology in advance of testing. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.6.4]	Each engine-generator set shall be tested at intervals ≤ five (5) years and at a power output ≥ 90% of the maximum allowable power output for the set. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.6]
6.2.4b	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.5.4, 4.6.4 ECT Order No. 05AQ-C014, 3/11/05, Condition 2.2.1	F S	VOC emissions from any single engine ≤1.63 lb/hr. Total VOC emissions from all engines ≤8.13 lb/hr.		
6.2.4c	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.5.4 ECT Order No. 05AQ-C014, 3/11/05, Condition 2.2.1	F S	Control efficiency of VOC entering the engines ≥98.0 w% or VOC outlet concentration ≤20 ppmdv as hexane at three percent (3%) oxygen.		
6.2.5a	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.5.5, 4.6 ECT Order No. 05AQ-C014, 3/11/05, Condition 2.2.1	F S	SO ₂ emissions from any single engine ≤4.56 lb/hr. Total SO ₂ emissions from all engines ≤22.76 lb/hr.	EPA Method 6C, 40 CFR 60, Appendix A, 7/1/96, or alternate methods proposed by permittee in writing and approved by Ecology in advance of testing. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.6.5]	Each engine-generator set shall be tested at intervals ≤ five (5) years and at a power output ≥ 90% of the maximum allowable power output for the set. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.6]

Applicable Requirement (Process #1, Power Generation – IC Engines)		Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.2.5b	WAC 173-400-040(6) (1st ¶), 8/20/93 WAC 173-400-040(6) (1st ¶), 3/1/11; ECT Order No. 05AQ-C014, 3/11/05, Condition 2.2.1	F S	SO ₂ ≤ 1000 ppmdv (corrected to 7% O ₂), average of 60 consecutive minutes.	See 6.2.5a.	Comply with 6.2.5a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.2.6	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.3	F	Project limited to five (5) internal combustion engine-generator sets.	None specified.	No additional monitoring required.
6.2.7	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.3, 4.7.2	F	Each engine-generator set is limited to a generator electrical output of ≤2.1 MW. Project limited to a total generator electrical output of ≤10.5 MW.	None specified.	A log shall be kept of power output for each engine-generator set. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.7.2]
6.2.8	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.3, 4.7.3	F	Project limited to a total monthly average landfill gas input rate of ≤ 3200 scfm. Increasing the landfill gas input rate above 3200 scfm on a monthly average may require approval by Ecology of separate Notice of Construction.	The landfill gas flow rate to the engine-generator sets shall be monitored by a flow indicator, which must operate continuously. Continuously shall mean at least 95 percent of the monthly engine-generator set operation, except for periods of monitoring system down-time provided that the permittee demonstrates that the down-time was not a result of inadequate design, operation, or maintenance, or any other reasonably preventable condition, and any necessary repairs to the monitoring system were conducted in a timely manner. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.7.3]	The landfill gas flow rate to the engine-generator sets shall be monitored by flow indicator records. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.7.3]

	Applicable Requirement (Process #1, Power Generation – IC Engines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.2.9	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.11.9	F	No fuel other than landfill gas shall be burned in the engine-generator sets unless written approval is obtained from Ecology.	None specified.	No additional monitoring required.
6.2.10	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.4, 4.7.2	F	Allowable hours of engine operation = 8585 hr/yr x number of engines. Total hours of engine operation shall not exceed the allowable hours of engine operation on a rolling annual basis calculated monthly.	None specified.	At the end of each month, the permittee shall calculate and record the total hours of engine operations. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.4] A log shall be kept of operating hours for each engine-generator set. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.7.2]
6.2.11a	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Conditions 4.8, 4.11.4, 4.11.6	F	The IC engines shall be properly operated and maintained. The engines will be operated and maintained in accordance with a site-specific O&M Manual, to be prepared by the permittee. O&M Manual shall be updated to reflect any modifications. A legible copy shall be kept on-site in a location known by and available to persons in direct operation of the described equipment.	O&M Manual shall at a minimum include: <ul style="list-style-type: none"> • Normal operating parameters, • A maintenance schedule, • Monitoring & recordkeeping requirements, • Monitoring procedures, and • Actions for abnormal operation. [NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.8]	The O&M manual and regular maintenance records shall be kept on file. This file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]

	Applicable Requirement (Process #1, Power Generation – IC Engines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.2.11b	40 CFR Part 63 Subpart ZZZZ, §6595, §6603, 1/19/11 WAC 173-400-115(1), 3/1/11	F S	Existing stationary reciprocating internal combustion engines located at an area source of HAP emissions must comply with operating limitations no later than October 19, 2013.	Ongoing maintenance shall include: <ul style="list-style-type: none"> • Change oil and filter every 1,440 hours of operation or annually, whichever comes first. Permittee may implement an oil analysis program as described in §63.6625(i) to extend this oil change interval. • Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first. • Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR Part 63 Subpart ZZZZ, §6603, 1/19/11]	Comply with 6.2.11a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.2.12	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.11.2	F	It shall be grounds for rescission of NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, if operation of the facility is discontinued for a period of 18 months.	None specified.	No additional monitoring required.
6.2.13	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.11.4	F	Legible copy of NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, shall be kept on-site in a location known by and available to persons in direct operation of the described equipment.	None specified.	No additional monitoring required.

	Applicable Requirement (Process #1, Power Generation – IC Engines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.2.14	NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, Condition 4.11.5	F	Operation of equipment must be conducted in compliance with all data & specifications submitted as part of the NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, application unless otherwise approved by Ecology.	None specified.	The NOC Order No. DE 98AQ-C174 2nd Revision, 1/20/06, and the data and specifications submitted as part of the application, shall be kept on file. This file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.2.15	Settlement Agreement and Agreed Order No. 2854, 10/14/05, Condition IV.A, as superceded by Ecology letter dated 4/5/06.	S	Each engine shall be allowed to operate so long as monitoring and testing demonstrate compliance with all applicable emission limits. In the event that two successive monitored CO results, of an engine, are \geq 10.40 lb/hr, the engine shall be shutdown and the cylinder heads shall be cleaned or replaced within 5 days of the 2 nd monitored result.	None specified.	Hours of operation shall be monitored and recorded for each engine, daily. Comply with 6.2.2. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.2.16	Settlement Agreement and Agreed Order No. 2854, 10/14/05, Condition IV.D.3-7, as superceded by Ecology letter dated 12/21/05.	S	Monitor each engine at least <u>once every two calendar days</u> in operation. Monitoring results shall be paired with the engine’s corresponding hours of operation.	CO Monitoring QA/QC Plan, as submitted by permittee and received by Ecology on 12/8/05 and as approved in writing by Ecology on 12/21/05.	No additional monitoring required.

6.3 Process #2, Landfill Gas Treatment System No. 1. The following requirements apply to the landfill gas treatment system for the internal combustion engines.

	Applicable Requirement (Process #2, Landfill Gas Treatment System No. 1)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.3.1	ECT Order No. 05AQ-C014, 3/11/05, Condition 2.1.1; Settlement Agreement and Agreed Order No. 2854, 10/14/05, Condition IV.C.1	S	The gas cleaning system shall employ iron sponge media and carbon bed technology.	None specified.	No additional monitoring required.
6.3.2	ECT Order No. 05AQ-C014, 3/11/05, Condition 2.1.2	S	All landfill gas shall be cleaned prior to combustion in the IC engines.	None specified.	A log shall be kept of operating hours of the landfill gas cleaning system. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.3.3	ECT Order No. 05AQ-C014, 3/11/05, Conditions 2.3.1, 2.3.2, 2.3.3	S	The gas cleaning system shall be properly operated and maintained. Failure to follow the requirements of the Operation and Maintenance (O&M) Manual and the adequacy of the O&M Manual will be two of the factors considered by Ecology in determining whether the gas cleaning system has been properly operated and maintained.	Operational parameters and procedures shall be defined. The O&M Manual shall include all procedures necessary to ensure the operation conforms to all permit conditions and state regulations. The O&M Manual shall at a minimum include: <ul style="list-style-type: none"> • The system’s configuration • Normal operating parameters • A maintenance schedule • Monitoring and record keeping requirements • A description of the monitoring procedures • Actions for abnormal operation [ECT Order No. 05AQ-C014, 3/11/05, Condition 2.3.2]	The O&M manual and maintenance records shall be kept on file. This file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [ECT Order No. 05AQ-C014, 3/11/05, Condition 2.3.3]

6.4 Process #3, Power Generation – Turbines. The following applicable requirements apply to the two combustion turbines and their associated exhausts.

	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.4.1	<p>NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.5.1, 2.5.2, 2.5.6, 2.9.1, 2.10.4</p> <hr/> <p>40 CFR part 60, Subpart KKKK, §60.7(a), §60.4335(b)(2), §60.4335(b)(3), §60.4345(c), §60.4345(d), §60.4345(e), 4/15/11</p> <hr/> <p>WAC 173-400-115(1), 3/1/11</p>	<p>F</p> <hr/> <p>F</p> <hr/> <p>S</p>	<p>Project is limited to two landfill gas-fired combustion turbines each burning $\leq 3,630$ cfm of landfill gas at site average conditions of 55 °F, and 496 Btu/cf landfill gas containing 54.4% methane content. Landfill gas usage may increase to 4,078 cfm per turbine in cold weather periods (at -10 °F or lower). Each turbine’s estimated maximum input rate and estimated power output is 108 MMBtu/hr and 10.1 MWe respectively; however, output is not limited to the estimated value, provided that no emission limit is exceeded. Turbines shall operate at a load no less than the minimum load demonstrated by prior Ecology-approved source tests to meet all of the conditions of this Order. Installation of more emission units than specified herein, landfill gas processing rates greater than the specified rates, or any modifications to the specified emission units that increase emissions of any regulated air pollutant, may require approval by Ecology of separate Notice of Construction applications.</p>	<p>The flow rate, heat content (Btu), and methane content (expressed as percent by volume methane) of landfill gas fed to the combustion turbines shall be monitored by flow indicators, appropriate heat content and methane content monitors, and recorders, which must operate continuously. Continuously shall mean at least 95 percent of the monthly flare operation, except for periods of monitoring system downtime, provided the permittee demonstrates that the down-time was not a result of inadequate design, operation, or maintenance, or any other reasonably preventable condition, and any necessary repairs to the monitoring system(s) were conducted in a timely manner. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.9.1]</p> <p>Permittee shall install, calibrate, maintain, and operate according to manufacturer instructions a fuel flow meter (or flow meters) to continuously measure the heat input to the combustion turbines, and a watt meter (or meters) to continuously measure the gross electrical output of the units in megawatt-hours. [40 CFR part 60, Subpart KKKK, §60.4335(b)(2), §60.4335(b)(3), §60.4345(c), §60.4345(d), 4/15/11]</p>	<p>Records shall be kept of all periods of downtime of the monitors. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.10.4]</p> <p>Permittee shall develop and keep on-site a quality assurance (QA) plan for the fuel flow and watt meters. [40 CFR part 60, Subpart KKKK, §60.4345(e), 4/15/11]</p> <p>The Permittee shall furnish the EPA a written notification or, if acceptable to both the EPA and the Permittee, electronic notification, as follows:</p> <ul style="list-style-type: none"> • A notification of the date facility construction is commenced, postmarked no later than 30 days after such date. • A notification of the actual date of initial startup of the facility, postmarked within 15 days after such date. • A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR §60.13(c). Notification shall be postmarked not less than 30 days prior to such date. <p>[40 CFR part 60, Subpart KKKK, §60.7(a), 4/15/11]</p>

	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.4.2	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.3.1.3, 2.4.1, 2.5.1	F	Project is limited to two 4-MW heat recovery systems. No landfill gas shall be combusted in the heat recovery systems.	None specified.	No additional monitoring required.
6.4.3	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.5.1, 2.10.2	F	Turbines and heat recovery systems are limited to combined generator electrical output of approximately ≤ 28.2 MW, unless further output can be generated without exceeding any emission limit contained in this Permit.	None specified.	A daily log shall be kept of the hours of operation of each turbine in base load, peak load, and startup and shutdown, and the average ambient temperature during that mode of operation [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.10.2]
6.4.4	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.5.7	F	The exhaust stacks for the combustion turbines shall each extend at least 55.0 feet (16.8 meters) above plant grade. Internal stack dimensions and operating parameters shall be in accordance with plans and specifications submitted to Ecology as part of the Notice of Construction application.	None specified.	No additional monitoring required.
6.4.5	40 CFR part 60, Subpart KKKK, §60.4333(a) WAC 173-400-115(1), 3/1/11	F S	Permittee shall operate and maintain each stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.	None specified.	Comply with 6.1.5 and 6.7.1. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]

	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.4.6	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.3.1.3	F	No fuel other than pre-cleaned landfill gas shall be burned in the combustion turbines.	None specified.	A log shall be kept of operating hours of the landfill gas cleaning system. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.4.7	40 CFR part 60, Subpart KKKK, §60.4330(a)(2), §60.4415(a)(1)(ii), 4/15/11 WAC 173-400-115(1), 3/1/11	F S	Permittee shall not burn in the subject stationary combustion turbines fuel which contains total potential sulfur emissions in excess of 26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) heat input, OR comply with 6.4.12d.	For performance testing use ASTM D1072, or alternatively D6228, D4084, D4468, D6667. [40 CFR part 60, Subpart KKKK, §60.4415(a)(1)(ii), 4/15/11]	Comply with 6.5.2. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.4.8a	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.3.1.4, 2.8.1, 2.8.3, 2.8.4, 2.8.5, 2.8.6, 2.8.7, 2.8.8, 2.8.9, 2.8.10, 2.10.4 Ecology letter dated 3/25/11	F S	To keep total particulate emissions in each turbine ≤ 0.0419 pounds of total particulate, as PM ₁₀ , per MMBtu heat input, PM ₁₀ emissions shall be controlled by turbine design, good combustion practices, and landfill gas cleaning.	EPA Methods 1 through 5, 40 CFR part 60, Appendix A, and Method 202, 40 CFR part 51, Appendix A. An alternate method may be proposed by permittee in writing and approved by Ecology in advance of testing. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.5, 2.8.6] Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All	Each turbine shall be performance tested at intervals ≤ five (5) years. If a PM emission limit has been exceeded during any of the previous three source tests, testing for PM shall be conducted annually. “Annually” shall mean no more than 12 calendar months following the previous performance test. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.3, 2.8.4] Permittee shall conduct performance testing to demonstrate compliance with all PM emission limits within 60 days after achieving the maximum production rate at which the turbine will be operated, but not later than 90 days after the restart of each turbine. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.8.1; Ecology letter dated 3/25/11]
6.4.8b	WAC 173-400-050(1), 8/20/93 WAC 173-400-050(1), 3/1/11	F S	PM emissions shall not exceed 0.1 grain/dscf.		
6.4.8c	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.6.3	F	PM ₁₀ emissions from each turbine ≤ 4.5 lb/hr, except during periods of startup and shutdown.	performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. A test plan, including a description of the methods proposed, shall be submitted for Ecology's approval at least 30 days prior to any	Records shall be kept of all periods of monitor downtime [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.10.4]

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				performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. Sampling ports and platforms for performance testing must be provided by Klickitat PUD. The test ports must meet the requirements of Method 1, 40 CFR, part 60, Appendix A. Adequate permanent and safe access to the test ports must be provided. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.7, 2.8.8, 2.8.9, 2.8.10]	
6.4.9a	<p>NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.3.1.2, 2.8.1, 2.8.3, 2.8.4, 2.8.5, 2.8.6, 2.8.7, 2.8.8, 2.8.9, 2.8.10, 2.9.4, 2.10.4, 2.10.8, 2.10.10</p> <p>Ecology letter dated 12/21/05</p> <p>Ecology letter dated 3/25/11</p>	<p>F</p> <p>S</p> <p>S</p>	<p>To keep total CO emissions in each turbine \leq 60 ppmvd at 15% oxygen, 1 hour average, except during periods of startup and shut down, CO emissions shall be controlled by turbine design, good combustion practices, landfill gas cleaning.</p>	<p>For performance testing use EPA Method 10, 40 CFR part 60, Appendix A, or an alternate method proposed by permittee in writing and approved by Ecology in advance of testing. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.5, 2.8.6]</p> <p>Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. A test plan, including a description of the methods proposed, shall be submitted for Ecology's</p>	<p>Each turbine shall be performance tested at intervals \leq five (5) years. If a CO emission limit has been exceeded during any of the previous three source tests, testing for CO shall be conducted annually. “Annually” shall mean no more than 12 calendar months following the previous performance test. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.3, 2.8.4]</p> <p>Permittee shall conduct performance testing to demonstrate compliance with all CO emission limits within 60 days after achieving the maximum production rate at which the turbine will be operated, but not later than 90 days after the restart of each turbine. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.8.1; Ecology letter dated 3/25/11]</p>
6.4.9b	<p>NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.6.3</p>	<p>F</p>	<p>CO emissions from each turbine \leq 15.6 lbs/hr, except during periods of startup and shutdown.</p>	<p>cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. A test plan, including a description of the methods proposed, shall be submitted for Ecology's</p>	<p>If monitoring is performed with CO CEMS, CEMS reports shall be submitted at least monthly within 30 days of the end of each calendar month and in a format approved by Ecology. CEMS reports shall include, but not be limited to, the following: Process or control equipment operating parameters; The daily maximum and average concentration, in the</p>

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			<p>approval at least 30 days prior to any performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. Sampling ports and platforms for performance testing must be provided by Klickitat PUD. The test ports must meet the requirements of Method 1, 40 CFR, part 60, Appendix A. Adequate permanent and safe access to the test ports must be provided. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.7, 2.8.8, 2.8.9, 2.8.10]</p> <p>CO shall be monitored with a portable CO analyzer or a CO CEMS, according to the Quality Assurance / Quality Control (QA/QC) plan, approved in writing by Ecology on 12/21/05. The actual CO emissions, including startup and shutdown emissions, shall be quantified monthly, using portable monitor data over the most recent 12-month period. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.9.4, 2.10.10; Ecology letter dated 12/21/05]</p>	<p>units of the standard(s), for each pollutant monitored; The duration and nature of any monitor down-time; Results of any monitor audits or accuracy checks; Results of any required stack tests. For each occurrence of monitored emissions in excess of the standard (by CEMS or approved alternative methodology), the report shall include the following:</p> <ul style="list-style-type: none"> • The time of occurrence; • Magnitude of the excess emission or process parameters; • The duration of the excess; • The probable cause; • Any corrective actions taken or planned; • Any other agency contacted. <p>[NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.10.8]</p> <p>Records shall be kept of all periods of monitor downtime [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.10.4]</p>

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6.4.10a	<p>NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.3.1.1, 2.8.1, 2.8.2, 2.8.4, 2.8.5, 2.8.6, 2.8.7, 2.8.8, 2.8.9, 2.8.10, 2.9.3, 2.10.8, 2.10.4, 2.10.10</p> <hr/> <p>40 CFR part 60, Subpart KKKK, §60.7(a), §60.8(d), §60.4335(b)(1), §60.4345(a), §60.4345(b), §60.4345(e), §60.4350, §60.4375(a), §60.4375(b), §60.4380, §60.4395, §60.4400(a), §60.4400(a)(1)(i), §60.4400(b), §60.4405, 4/15/11</p> <hr/> <p>WAC 173-400-115(1), 3/1/11</p> <hr/> <p>Ecology letter dated 3/25/11</p>	<p>F</p> <hr/> <p>F</p> <hr/> <p>S</p> <hr/> <p>S</p>	<p>Except during periods of startup and shut down, NO_x emissions from each turbine shall not exceed:</p> <ul style="list-style-type: none"> • 60 ppmvd, at 15% oxygen, 3-hour average, when the methane content in the landfill gas fuel, averaged over the previous three (3) hours, is 50% methane by volume, or less. • A linear progression from 60 to 74 ppmvd at 15% oxygen, 3-hour average, for methane content in the landfill gas fuel, averaged over the previous 3 hours, varying between 50% and 55% methane by volume. • 74 ppmvd at 15% oxygen, 3-hour average, when the methane content in the landfill gas fuel, averaged over the previous 3 hours, is higher than 55% methane by volume. <p>NO_x emissions shall be controlled by turbine design, good combustion practices, supplemental use of water injection, and landfill gas cleaning.</p>	<p>For performance tests use EPA Method 7E, or Method 20, 40 CFR part 60, Appendix A. An alternate method may be proposed by permittee in writing and approved by Ecology in advance of testing. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.5, 2.8.6; 40 CFR part 60, Subpart KKKK, §60.4400(a)(1)(i), 4/15/11]</p> <p>Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.7, 2.8.8; 40 CFR part 60, Subpart KKKK, §60.4400(b), 4/15/11]</p> <p>A test plan, including a description of the methods proposed, shall be submitted for Ecology's approval at least 30 days prior to any performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. Sampling ports and platforms for performance testing</p>	<p>Performance testing for NO_x from each turbine shall be conducted annually. The ambient temperature must be greater than 0°F during each performance test. “Annually” shall mean no more than 12 calendar months following the previous performance test. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.2, 2.8.4; 40 CFR part 60, Subpart KKKK, §60.4400(a), 4/15/11]</p> <p>Permittee shall conduct performance testing to demonstrate compliance with all NO_x emission limits within 60 days after achieving the maximum production rate at which the turbine will be operated, but not later than 90 days after the restart of each turbine. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.8.1; Ecology letter dated 3/25/11]</p> <p>Permittee shall conduct performance tests for NO_x emissions within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, and furnish the EPA a written report of the results of the test. The initial performance test may be performed in the following alternative manner:</p> <ul style="list-style-type: none"> • Perform a minimum of nine RATA reference method runs, with a minimum time per run of 21 minutes, at a single load level, within plus or minus 25 percent of 100 percent of peak load. The ambient temperature must be greater than 0 °F during the RATA runs. • For each RATA run, concurrently measure the heat input to the unit using a fuel flow meter (or flow meters) and measure the electrical and thermal output from the unit. • Use the test data both to demonstrate compliance with the applicable NO_x emission limit under §60.4320 and to provide the required reference

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			<p>must be provided by Klickitat PUD. The test ports must meet the requirements of Method 1, 40 CFR, part 60, Appendix A. Adequate permanent and safe access to the test ports must be provided. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.9, 2.8.10]</p> <p>Permittee shall also provide notice, in accordance with 40 CFR §60.8(d), to the EPA of any scheduled or rescheduled performance test. A written report of the results of each performance test shall be submitted to the EPA before the close of business on the 60th day following the completion of the performance test. [40 CFR part 60, Subpart KKKK, §60.8(d), §60.4375(b), 4/15/11]</p> <p>The permittee shall install, calibrate, maintain, and operate Continuous Emission Monitoring Systems (CEMS) for NO_x and O₂, with an automated data acquisition and handling system that complies with 40 CFR part 60, Appendix B, Performance Specifications, and 40 CFR part 60, Appendix F, Quality Assurance Procedures. The actual NO_x emissions, including startup and shutdown emissions, from the turbines, shall be quantified monthly, using CEMS over the most recent 12-month period. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.9.3, 2.10.10; 40 CFR</p>	<p>method data for the RATA of the CEMS described under §60.4335.</p> <ul style="list-style-type: none"> Compliance with the applicable emission limit in §60.4320 is achieved if the arithmetic average of all of the NO_x emission rates for the RATA runs, expressed in units of ppm or lb/MWh, does not exceed the emission limit. [40 CFR part 60, Subpart KKKK, §60.7(a), §60.8(d), §60.4405, 4/15/11] <p>Permittee shall submit a written report of the results of each performance test to EPA before the close of business on the 60th day following the completion of the performance test. [40 CFR part 60, Subpart KKKK, §60.4375(b), 4/15/11]</p> <p>CEMS reports shall be submitted at least monthly within 30 days of the end of each calendar month and in a format approved by Ecology. CEMS reports shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> Process or control equipment operating parameters; The daily maximum and average concentration, in the units of the standard(s), for each pollutant monitored; The duration and nature of any monitor down-time; Results of any monitor audits or accuracy checks; Results of any required stack tests. <p>For each occurrence of monitored emissions in excess of the standard (by CEMS or approved alternative methodology), the report shall include the following:</p> <ul style="list-style-type: none"> The time of occurrence; Magnitude of the excess emission or process parameters; The duration of the excess; The probable cause; Any corrective actions taken or planned; Any other agency contacted. <p>[NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11,</p>

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				<p>part 60, Subpart KKKK, §60.4335(b)(1), §60.4345(a), 4/15/11]</p> <p>During each full unit operating hour, both the NO_x monitor and the O₂ monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NO_x emission rate for the hour. [40 CFR part 60, Subpart KKKK, §60.4345(b), 4/15/11]]</p>	<p>Condition 2.10.8]</p> <p>Permittee shall develop and keep on-site a quality assurance (QA) plan for the CEMS equipment. [40 CFR part 60, Subpart KKKK, §60.4345(e), 4/15/11]</p> <p>CEMS data shall be processed according to §60.4350 to determine excess emissions, as defined in §60.4380. Submit reports of excess emissions (above and beyond those required by Section 3.7) and monitor downtime to EPA in accordance with 40 CFR §60.7(c), §60.7(d), and §60.7(g). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period. [40 CFR part 60, Subpart KKKK, §60.4350, §60.4375(a), §60.4380, §60.4395, 4/15/11]</p> <p>Records shall be kept of all periods of monitor downtime. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.10.4]</p>
6.4.10b	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.6.3	F	NO _x emissions from each turbine ≤ 41.9 lbs/hr, except during startup and shutdown.	See 6.4.10a.	Comply with 6.4.10a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.4.10c	<p>40 CFR part 60, Subpart KKKK, §60.4320(a), 4/15/11</p> <hr/> <p>WAC 173-400-115(1), 3/1/11</p>	<p>F</p> <hr/> <p>S</p>	NO _x emissions from each turbine ≤ 74 ppm at 15 percent O ₂ or 460 ng/J of useful output (3.6 lb/MWh).	See 6.4.10a.	Comply with 6.4.10a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]

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6.4.11a	<p>NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.3.1.5, 2.8.1, 2.8.3, 2.8.4, 2.8.5, 2.8.6, 2.8.7, 2.8.8, 2.8.9, 2.8.10</p> <hr/> <p>Ecology letter dated 3/25/11</p>	<p>F</p> <hr/> <p>S</p>	<p>To keep total VOC emissions in each turbine ≤ 0.135 lb VOC/MMBtu heat input, VOC emissions shall be controlled by turbine design, good combustion practices, and landfill gas cleaning. Control efficiency of VOCs entering the turbines ≥ 90.0 w% or VOC outlet concentration ≤ 20 ppmv as hexane at three percent (3%) oxygen.</p>	<p>EPA Methods 25A or 18, 40 CFR part 60, Appendix A. Alternate methods may be proposed by permittee in writing and approved by Ecology in advance of testing. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.5, 2.8.6]</p> <p>Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. A test plan, including a description of the methods proposed, shall be submitted for Ecology’s approval at least 30 days prior to any performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. Sampling ports and platforms for performance testing must be provided by Klickitat PUD. The test ports must meet the requirements of Method 1, 40 CFR, part 60, Appendix A. Adequate permanent and safe access to the test ports must be provided. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.7, 2.8.8, 2.8.9, 2.8.10]</p>	<p>Each turbine shall be performance tested at intervals \leq five (5) years. If a VOC emission limit has been exceeded during any of the previous three source tests, testing for VOCs shall be conducted annually. “Annually” shall mean no more than 12 calendar months following the previous performance test. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.3, 2.8.4]</p> <p>Permittee shall conduct performance testing to demonstrate compliance with all VOC emission limits within 60 days after achieving the maximum production rate at which the turbine will be operated, but not later than 90 days after the restart of each turbine. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.8.1; Ecology letter dated 3/25/11]</p>

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6.4.11b	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.6.3	F	VOC emissions from each turbine \leq 14.6 lbs/hr, except during periods of startup and shutdown.	See 6.4.11a.	Comply with 6.4.11a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.4.12a	<p>NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.3.1.3, 2.8.1, 2.8.2, 2.8.4, 2.8.5, 2.8.6, 2.8.7, 2.8.8, 2.8.9, 2.8.10</p> <hr/> <p>40 CFR part 60, Subpart KKKK, §60.7(a), §60.8(d), §60.4375(a), §60.4375(b), §60.4395, 4/15/11</p> <hr/> <p>WAC 173-400-115(1), 3/1/11</p> <hr/> <p>Ecology letter dated 3/25/11</p>	<p>F</p> <hr/> <p>F</p> <hr/> <p>S</p> <hr/> <p>S</p>	<p>SO₂ emissions from each combustion turbine \leq 0.014 lb SO₂ per million British thermal units (lb/MMBtu) heat input.</p>	<p>For performance testing use EPA Method 6C, 40 CFR part 60, Appendix A. Alternate methods may be proposed by permittee in writing and approved by Ecology in advance of testing. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.5, 2.8.6]</p> <p>Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. A test plan, including a description of the methods proposed, shall be submitted for Ecology's approval at least 30 days prior to any performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. Sampling ports and platforms for performance testing must be provided by Klickitat PUD. The test ports must meet the requirements of Method 1, 40 CFR, part 60, Appendix A. Adequate</p>	<p>Performance testing for and SO₂ from each turbine shall be conducted annually. The ambient temperature must be greater than 0°F during each performance test. “Annually” shall mean no more than 12 calendar months following the previous performance test. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.2, 2.8.4]</p> <p>Permittee shall conduct performance testing to demonstrate compliance with all SO₂ emission limits within 60 days after achieving the maximum production rate at which the turbine will be operated, but not later than 90 days after the restart of each turbine. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.8.1; Ecology letter dated 3/25/11]</p> <p>Permittee shall conduct performance tests for SO₂ emissions within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, and furnish the EPA a written report of the results of the test. [40 CFR part 60, Subpart KKKK, §60.7(a), §60.8(d), 4/15/11]</p> <p>Permittee shall submit a written report of the results of each performance test to EPA before the close of business on the 60th day following the completion of the performance test. [40 CFR part 60, Subpart KKKK, § 60.4375(b), 4/15/11]</p> <p>Permittee shall develop and keep on-site a quality assurance (QA) plan for the CEMS equipment. [40 CFR part 60, Subpart KKKK, §60.4345(e), 4/15/11]</p> <p>Submit reports (above and beyond the reporting</p>

	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
				<p>permanent and safe access to the test ports must be provided. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.7, 2.8.8, 2.8.9, 2.8.10]</p> <p>Permittee shall also provide notice, in accordance with 40 CFR §60.8(d), to the EPA of any scheduled or rescheduled performance test. A written report of the results of each performance test shall be submitted to the EPA before the close of business on the 60th day following the completion of the performance test. [40 CFR part 60, Subpart KKKK, §60.8(d), §60.4375(b), 4/15/11]</p>	<p>required by Section 3.7) of excess emissions and monitor downtime, as defined in 40 CFR §60.4385, to EPA in accordance with 40 CFR §60.7(c), §60.7(d), and §60.7(g). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period. [40 CFR part 60, Subpart KKKK, § 60.4375(a), § 60.4395, 4/15/11]</p>
6.4.12b	<p>WAC 173-400-040(6) (1st ¶), 8/20/93</p> <p>WAC 173-400-040(6) (1st ¶), 3/1/11</p>	<p>F</p> <p>S</p>	<p>SO₂ ≤ 1000 ppm_{dv} (corrected to 7% O₂), average of 60 consecutive minutes.</p>	<p>See 6.4.12a.</p>	<p>Comply with 6.4.12a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]</p>
6.4.12c	<p>NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.6.3</p>	<p>F</p>	<p>SO₂ emissions from each turbine ≤ 1.5 lb/hr, except during periods of startup and shutdown.</p>	<p>See 6.4.12a.</p>	<p>Comply with 6.4.12a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]</p>
6.4.12d	<p>40 CFR part 60, Subpart KKKK, §60.4330(a)(3), §60.4345(e), §60.4375, §60.4395, 4/15/11</p> <p>WAC 173-400-115(1), 3/1/11</p>	<p>F</p> <p>S</p>	<p>SO₂ emissions from each turbine ≤ 65 ng/J (0.15 lb/MWh) heat input, <u>OR</u> comply with 6.4.7.</p>	<p>See 6.4.12a.</p>	<p>Comply with 6.4.12a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]</p>

	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.4.13	<p>NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.6.3, 2.8.1, 2.8.3, 2.8.4, 2.8.5, 2.8.6, 2.8.7, 2.8.8, 2.8.9</p> <hr/> <p>Ecology letter dated 3/25/11</p>	<p>F</p> <hr/> <p>S</p>	<p>The visible emissions and opacity of each turbine’s exhaust shall not exceed 10%, except during periods of startup and shutdown.</p>	<p>EPA Method 9, 40 CFR part 60, Appendix A. Alternate test methods may be proposed by the permittee in writing and approved by Ecology in advance of testing. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.5, 2.8.6]</p> <p>Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. A test plan, including a description of the methods proposed, shall be submitted for Ecology’s approval at least 30 days prior to any performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.7, 2.8.8, 2.8.9]</p>	<p>Each turbine shall be performance tested at intervals \leq five (5) years. If a the visible emissions or opacity limit has been exceeded during any of the previous three source tests, testing for visible emissions or opacity shall be conducted annually. “Annually” shall mean no more than 12 calendar months following the previous performance test. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.8.3, 2.8.4]</p> <p>Permittee shall conduct initial performance testing to demonstrate compliance with visible emissions and opacity limits within 60 days after achieving the maximum production rate at which the turbine will be operated, but not later than 90 days after the restart of each turbine. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.8.1; Ecology letter dated 3/25/11]</p> <p>1) The permittee shall conduct monthly visible emissions surveys of all exhaust stacks during daylight hours as follows: a) the survey shall be conducted from a location with a clear view of the emission unit and where the sun is not directly in the observer’s eyes. The survey location shall be at least 15 feet but not more than 0.25 miles from the source; b) survey shall be conducted during operation; c) the observer will be educated in the general procedures for determining the presence of visible emissions (i.e. effects on the visibility of emissions caused by background contrast, position of the sun and amount of ambient lighting, and observer position relative to source and sun); d) the survey shall consist of a minimum 15-second visual observation of each emission unit to identify those emission units which exhibit visible emissions; e) in addition to the records required under condition 2.15, the observer shall record the wind direction, sky condition, sun location with respect to the source and the survey location, and the time duration of the survey.</p> <p>2) The permittee shall conduct Ecology Method 9A</p>

	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
					testing of an emission unit when visible emissions, other than uncombined water, are observed during a survey or are otherwise observed by the permittee. Testing shall be conducted as follows: a) testing shall be initiated as soon as possible, but not later than 24 hours after the requirement to conduct such testing is triggered; b) all testing shall be performed during periods when the subject emissions unit is operating; c) testing shall consist of certified opacity readings at 15-second intervals over a minimum period of six consecutive minutes (24 consecutive readings) unless any two readings are greater than 20% opacity in which case the testing period shall be 60 consecutive minutes or until a violation is documented. If a violation is documented, appropriate and timely action shall be taken (as soon as possible, but within 24 hours) to identify and correct the problem causing the opacity. The required recordkeeping shall include the name of the person recording the information, the name(s) of the person(s) taking the corrective action, and the nature, time, date, and effectiveness of any corrective action taken in response to a violation. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]

6.5 Process #4, Landfill Gas Treatment System No. 2. The following requirements apply to the landfill gas treatment system for the combustion turbines.

	Applicable Requirement (Process #4, Landfill Gas Treatment System No. 2)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.5.1	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.4.1	F	The use of a properly operated and maintained landfill gas cleaning system designed to lower concentrations of organic compounds, sulfur compounds, and other impurities, from the landfill gas to be burned.	Comply with 6.5.2 [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	No additional monitoring required.

	Applicable Requirement (Process #4, Landfill Gas Treatment System No. 2)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.5.2	<p>NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.3.1.3, 2.9.5, 2.10.4</p> <hr/> <p>40 CFR part 60, Subpart KKKK, §60.4365, §60.4370(b), §60.4370(c), §60.4415(a)(1)(ii), 4/15/11</p> <hr/> <p>WAC 173-400-115(1), 3/1/11</p>	<p>F</p> <hr/> <p>F</p> <hr/> <p>S</p>	<p>Fuel cleaning to reduce sulfur compounds in the fuel to below 20 ppm by weight (ppmw) of sulfur, as hydrogen sulfide.</p>	<p>For performance testing use ASTM D1072, or alternatively D6228, D4084, D4468, D6667. [40 CFR part 60, Subpart KKKK, §60.4415(a)(1)(ii), 4/15/11]</p> <p>Cleaning of landfill gas shall be achieved by maintaining a landfill gas cleaning system designed to lower concentrations of organic compounds, sulfur compounds, and other impurities, from the landfill gas to be burned. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.3.1.3]</p> <p>Permittee may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input. To make the required demonstration, use representative fuel sampling data which shows that the sulfur content of the fuel does not exceed 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFT Part 75 of is required. [40 CFR part 60, Subpart KKKK, §60.4365, 4/15/11]</p>	<p>Permittee shall monitor sulfur content of the fuel being fired in the turbines. Records shall be kept of all periods of monitor downtime. This requirement will be satisfied by:</p> <ul style="list-style-type: none"> • Daily monitoring of sulfur content with an onsite total sulfur analyzer; or • Daily monitoring of sulfur content with an onsite H₂S analyzer, provided sulfur compounds in the fuel are less than 10 ppm by weight (ppmw) of sulfur, as hydrogen sulfide, or total SO₂ emissions from any combustion turbine is less than 0.007 lb SO₂ per million British thermal units (lb/MMBtu) heat input, as measured during the most recent performance test; or • Daily monitoring of sulfur content with an onsite H₂S analyzer, provided H₂S comprises 95% or more of the total sulfur content of the fuel, as measured during the most recent performance test. <p>[NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.9.5, 2.10.4]</p> <p>The sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day. The Permittee may develop custom schedules for determination of the landfill gas total sulfur content, based on the design and operation of the facility and the characteristics of the landfill gas. Custom schedules may require EPA approval and data substantiation. [40 CFR part 60, Subpart KKKK, §60.4370(b), §60.4370(c), 4/15/11]</p>

6.6 Process #5, Enclosed Flare. The following applicable requirements apply to the enclosed flare and its associated exhausts.

	Applicable Requirement (Process #5, Enclosed Flare)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.6.1	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.4.2, 2.5.3, 2.9.2, 2.10.3, 2.10.4	F	Project is limited to one standard enclosed flare operated at a maximum flow rate of 12,000 standard cubic feet (scf) of landfill gas per hour and a maximum heat input rate of 6.0 MMBtu/hr. The flare shall be properly maintained and operated to combust landfill gas which is vented during periods when the landfill gas treatment system is operating.	None specified.	The landfill gas flow rate and heat input (Btu) to the enclosed flare shall be monitored and recorded at least quarterly. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.9.2] A log shall be kept of operating hours, gas flow rate and heat input for the enclosed flare. Records shall be kept of all periods of monitor downtime. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.10.3, 2.10.4]
6.6.2	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.5.8	F	The release height for the enclosed flare shall be at least 30 feet (9.1 meters) above plant grade. Internal stack dimensions and operating parameters shall be in accordance with plans and specifications submitted to Ecology as part of the Notice of Construction application.	None specified.	No additional monitoring required.
6.6.3a	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.3.2.4	F	PM emissions controlled by pre-cleaning or filtering of landfill gas, and proper operation and maintenance to keep PM ₁₀ emissions from the flare ≤ 0.020 lb/MMBtu heat input.	EPA Method 5, 40 CFR 60, Appendix A and EPA Method 202, 40 CFR 51, Appendix M. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	No additional monitoring required.
6.6.3b	WAC 173-400-050(1), 8/20/93 WAC 173-400-050(1), 3/1/11	F S	PM emissions shall not exceed 0.1 grain/dscf.		

Applicable Requirement (Process #5, Enclosed Flare)		Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.6.4	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.3.2.2	F	CO emissions controlled by flare design and proper operation and maintenance of the flare to keep CO emissions ≤ 0.033 lb/MMBtu heat input.	EPA Method 10A, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	No additional monitoring required.
6.6.5	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.3.2.1	F	NO _x emissions controlled by flare design and proper operation and maintenance of the flare to keep NO _x emissions ≤ 0.053 lb/MMBtu heat input.	EPA Method 7E, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	No additional monitoring required.
6.6.6	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.3.2.5	F	VOC emissions controlled by the use of a standard enclosed flare, operated at a temperature not lower than 1600 °F, with a retention time of at least 0.6 seconds. Destruction efficiency of non-methane organic compounds (NMOC) entering the flare shall be at least 98.0 weight percent, or the outlet concentration of NMOC shall be reduced to 0.227 lb/MMBtu heat input or less.	<p>RM 25C OR RM 18. If using RM 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:</p> <p>Destruction Efficiency =</p> <p style="text-align: center;">_____</p> <p>Where,</p> <p>NMOC_{in} = mass of NMOC entering control device.</p> <p>NMOC_{out} = mass of NMOC exiting control device.</p> <p>[WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]</p>	No additional monitoring required.

Applicable Requirement (Process #5, Enclosed Flare)		Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6..6.7a	WAC 173-400-040(6) (1st ¶), 8/20/93	F	SO ₂ ≤ 1000 ppmdv (corrected to 7% O ₂), average of 60 consecutive minutes.	EPA Method 6C, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	No additional monitoring required.
	WAC 173-400-040(6) (1st ¶), 3/1/11	S			
6.6.7b	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.3.2.3	F	SO ₂ emissions from the flare ≤ 0.015 lb/MMBtu heat input.		
6.6.8	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.5.4, 2.9.7	F	An interlock or another failsafe device shall prevent landfill gas from entering the flare if the temperature in the combustion chamber is < 1,600°F, except during the first 15 minutes following startup of the flare.	The flare shall be equipped with a temperature indicator and recorder which measures and records the gas temperature in the flare stack. The temperature indicator shall be located above the flame zone, at least three (3) feet below the top of the flare shroud and at least 0.6 seconds downstream of the burner. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.9.7]	The temperature indicator and recorder must operate continuously. Continuously shall mean at least 95 percent of the monthly engine-generator set operation, except for periods of monitoring system down-time provided that the permittee demonstrates that the down-time was not a result of inadequate design, operation, or maintenance, or any other reasonably preventable condition, and any necessary repairs to the monitoring system were conducted in a timely manner. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.9.7]
6.6.9	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.5.5	F	The flare shall be equipped with a landfill gas supply shut-off safety system, which in the event of emergency, automatically isolates the flare from the landfill gas supply line, shuts off the blower, and triggers a failure alarm to notify a responsible party of the shutdown.	Tests may be conducted electronically, without an actual flare shutdown. [NOC Order No. 08AQ- C080, 2nd Revision, 3/25/11, Condition 2.5.5]	The safety system shall be tested monthly to ensure it is working properly and the results recorded. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.5.5]

6.7 Common Requirements for Processes #3, #4, and #5. The following applicable requirements apply equally to the turbines, landfill gas treatment system No.2, and the enclosed flare, as well as their associated exhausts.

	Applicable Requirement (Common Requirements for Processes #4, #5, #6)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.7.1	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.7.1, 2.7.2, 2.7.3, 2.9.6, 2.10.4, 2.10.6	F	Permittee shall follow all recommended installation, configuration, operation, and maintenance provisions supplied by the turbine, LFG cleaning system No.2, and enclosed flare manufacturers. The equipment shall be properly operated and maintained in accordance with a site-specific operation and maintenance (O&M) manual, prepared by the permittee. Failure to follow the requirements of the O&M manual, or the adequacy of the O&M manual, may be considered proof that the permitted equipment was not properly operated and maintained.	Operational parameters and procedures shall be defined. The O&M Manual shall include all procedures necessary to ensure the operation conforms to all permit conditions and state regulations. The O&M Manual shall at a minimum include: <ul style="list-style-type: none"> • The system's configuration • Normal operating parameters • A maintenance schedule • Monitoring and record keeping requirements • A description of the monitoring procedures • Actions for abnormal operation • Reference to on-line monitors. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.7.2, 2.9.6]	In accordance with WAC 173-400-101, the permittee shall review and update the O&M manual at least annually. O&M records shall be available for inspection by Ecology, organized in a readily accessible manner, and retained for at least five (5) years. The O&M manual shall be updated to reflect any modifications to the source or operating procedures. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.7.2, 2.7.3] Records shall be kept of all periods of downtime of monitors. Permittee shall report to Ecology any equipment breakdown, or malfunction, that results in the emission of raw landfill gas, within 30 days of occurrence, including a description of immediate remedial measures undertaken by the source to correct the problem and prevent further uncontrolled emissions into the atmosphere. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.10.4, 2.10.6]
6.7.2	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.12.3	F	It shall be grounds for rescission of NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, if operation of the facility is discontinued for a period of 18 months. Ecology may extend the 18-month period upon a satisfactory showing that an extension is justified.	None specified.	No additional monitoring required.

	Applicable Requirement (Common Requirements for Processes #4, #5, #6)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.7.3	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.2, 2.6.1, 2.8.9	F	Total NO _x emissions from the project, including emissions during startup and shutdown of the turbines shall not exceed 249.0 tons per year, rolled monthly.	EPA Method 7E, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	Comply with 3.9 and 6.4.10a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.7.4	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.2, 2.8.9	F	The proposed project shall not emit > 131.9 tpy of VOC annually, rolled monthly, including startup and shut-down emissions.	EPA Methods 25A or 18, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	Comply with 3.9 and 6.4.11. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.7.5	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.2, 2.8.9	F	The proposed project shall not emit > 13.4 tpy of SO ₂ annually, rolled monthly, including startup and shut-down emissions.	EPA Method 6C, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	Comply with 3.9 and 6.4.12a. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.7.6	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.2, 2.8.9	F	The proposed project shall not emit > 39.7 tpy of PM ₁₀ annually, rolled monthly, including startup and shut-down emissions.	EPA Method 5, 40 CFR 60, Appendix A and EPA Method 202, 40 CFR 51, Appendix M. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	Comply with 3.9 and 6.4.8. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.7.7	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.2, 2.8.9	F	The proposed project shall not emit > 48.1 tpy of PM _{2.5} annually, rolled monthly, including startup and shut-down emissions.	EPA Method 5, 40 CFR 60, Appendix A and EPA Methods 201A and 202, 40 CFR 51, Appendix M. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	Comply with 3.9 and 6.4.8. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.7.8	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Conditions 2.2, 2.6.2, 2.8.9	F	The proposed project shall not emit > 137.8 tpy of CO annually, rolled monthly, including startup and shut-down emissions.	EPA Method 10A, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	Comply with 3.9 and 6.4.9. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]

	Applicable Requirement (Common Requirements for Processes #4, #5, #6)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
6.7.9	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.6.4	F	Visible emissions from the project shall not exceed zero (0) percent opacity at the property boundary.	EPA RM 9, 40 CFR 60, Appendix A, 7/1/05. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]	Comply with 6.1.7, except that: 2) The permittee shall conduct RM 9 testing when visible emissions are observed during a survey or are otherwise observed by the permittee. Testing shall be conducted as follows: a) testing shall be initiated as soon as possible, but not later than 24 hours after the requirement to conduct such testing is triggered; b) all testing shall be performed during periods when the subject emissions unit is operating; c) testing shall consist of certified opacity readings at 15-second intervals over a minimum period of six consecutive minutes (24 consecutive readings). If a violation is documented, appropriate and timely action shall be taken (as soon as possible, but within 24 hours) to identify and correct the problem causing the opacity. The required recordkeeping shall include the name of the person recording the information, the name(s) of the person(s) taking the corrective action, and the nature, time, date, and effectiveness of any corrective action taken in response to a violation. [WAC 173-401-615(1), 8/13/01, 12/1/10 (S)]
6.7.10	NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.12.6	F	An emergency spill plan shall be in place during operation of the source, and all operations personnel shall be familiar with this plan.	The plan shall be posted at the source. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.12.6]	Any petroleum or chemical spills shall be reported immediately to the Department of Ecology, Central Regional Office, at (509) 575-2490. [NOC Order No. 08AQ-C080, 2nd Revision, 3/25/11, Condition 2.12.6]

7.0 INAPPLICABLE REQUIREMENTS

Ecology has determined that the entire source, including all emission units, are not subject to the following requirements at the time of permit issuance. Some of the requirements listed below may become applicable during the permit term due to an invoking event, even though the requirement is deemed inapplicable at the time of permit issuance. Such requirements shall be met on a timely basis by the permittee by submittal of a compliance schedule therefor, per WAC 173-401-510(2)(h)(iii)(B).

Inapplicable Requirement	Title	Explanation
40 CFR 60 Subparts GG, Da, Db, Dc	Standards of Performance for New Stationary Sources	Source is subject to subpart KKKK , which exempts subject stationary combustion turbines and heat recover steam generators from these subparts.
40 CFR 68	Accidental Release Program	Source does not store chemicals in quantities that trigger applicability.
40 CFR 72	Acid Rain Program	Source does not combust fossil fuel.
Chapter 173-470 WAC	Ambient Air Quality Standards for Particulate Matter	Applicable if triggered.
Chapter 173-474 WAC	Ambient Air Quality Standards for Sulfur Oxides	Applicable if triggered.
Chapter 173-475 WAC	Ambient Air Quality Standards for Carbon Monoxide, Ozone, and Nitrogen Dioxide	Applicable if triggered.
Chapter 173-480 WAC	Ambient Air Quality Standards and Emission Limits for Radionuclides	Source does not emit this regulated pollutant.
Chapter 173-481 WAC	Ambient Air Quality and Environmental Standards for Fluorides	Source does not emit this regulated pollutant.